The components of the audio system **34**, including the receiver and the display panel, may be mounted in the dashboard **32** of the automobile as shown in FIG. **1**. However, this arrangement is not a necessary requirement of the present invention. In this regard, the receiver of the audio system can be mounted in the housing **12** along with the transmitter in other embodiments of the present invention besides the embodiment shown in FIGS. **1–5**.

The electronic components (not shown) arranged on control PC board **26** will vary according to the desired operating functions of the transmitting device. In the schematic circuit diagram shown in FIG. **4**, the circuitry is adapted to transmit signals sufficient to drive an audio system including various components, such as a cassette deck, a CD player, a receiver including an AM/FM tuner, and other components which may be added to the audio system. The electronics are also adapted to permit various stations to be keyed into memory cells.

The particular circuitry shown in FIG. **4** may include a 16 pin IC and various other well-known circuit components such as resistors, capacitors, transistors, LEDs, oscillators and the like. The transmitting device may be driven from the electrical system of the associated automobile, and may also include an alternative power source, such as external batteries. It should be appreciated that the control of the receiver of the audio system **34** of the embodiment shown in FIG. **1** may be accomplished by infrared signals sent by the transmitter to the remote receiver location. Alternatively, communication between the transmitter and the receiver of the present invention may be accomplished through other means such as hard-wiring, or through printed circuit technology.

One desirable control feature of the transmitter of the present invention is accomplished by providing a lock/unlock actuator tab **22**. Of course, separate lock actuator and unlock actuators can be provided, but it should not be necessary since a single actuator can lock and unlock the system. This feature of the present invention will permit the driver of the automobile to selectively lock-up the keypad and/or other remote controls so that inadvertent actuation of the various control features will not occur while the driver's hand is resting on the head **11** of the shifter **10**. When the driver desires to use the audio system, he or she can simply depress the "unlock" actuator tab **22** so that all of the control functions of the transmitter can be selectively actuated.

In operation, the driver will initially place his or her hand on the head **11** of the shifter **10** to place the associated automobile into a drive gear. When operating automobiles including a center console mounted, or floor mounted, shifter, the driver often feels comfortable driving the automobile with his or her left hand on the steering wheel while the right hand is retained on the head **11** of the shifter **10**. When operating such an automobile that does not include the control unit of the present invention, it is usually required that the driver remove his or her hand entirely from the shifter head **11** and reach forward to the dashboard **32**, or some other remote location, so that the various control functions of the audio system may be selected. In this scenario, it is often dangerous for the driver to attempt to control the various functions of an associated audio system while operating the automobile. However, the present invention overcomes this problem. In this regard, when the driver desires to control the audio system of the present invention, all that is required is that the driver extend his or her fingers from their rest position within the aperture **18** toward the desired actuator tabs **22** which extend through the top cover **20** of the housing **12**. Thus, the driver may effectively control the entire audio system by merely extending his or her fingers from the initial rest position, without taking his or her hand off of the shifter head **11**.

The second preferred embodiment of the present invention is shown in FIG. **6** wherein the transmitter is retained directly within a cavity of the head **111** of a shifter **110**. In this embodiment, the lock and unlock actuator tabs **122** are particularly important features of the present invention, as the driver is more apt to inadvertently depress one or more of the actuator tabs **122** while changing gears, or while merely resting his or her hand on the shifter head **111**.

A third preferred embodiment of the present invention is shown in FIG. **7**. This embodiment is particularly desirable for those individuals who purchase automobiles that are not initially equipped with the control unit of the present invention mounted on the shifter itself. Thus, the embodiment of FIG. **7** indicates that the control unit of the present invention may be purchased as an after-market device, which can be easily mounted on the stick shift. In this embodiment, the control unit may be mounted at various distances from the head **211** of the shifter **210**. As shown in FIG. **7**, the control unit is adapted to be secured to the stem of the shifter in the general vicinity of the shifter head **211**, but it is not directly secured thereto. This after-market embodiment includes a housing assembly **220** including a plurality of actuated tabs **222** thereon. The housing **220** may be secured to a front half of a removable mounting assembly **240** by various well-known means. This embodiment may also include a rear half of a removable mounting assembly **242** which is adapted to be secured to the front half **240**.

To accomplish attachment of the mounting assembly to the stem of the shifter **210**, a plurality of threaded screws **244**A and **244**B may be placed through apertures **246**A and **246**B which extend through the rear half of the removable mounting assembly along a plane generally transverse to the axis of the stem of the shifter **210** as shown in FIG. **7**. The threaded screws may then be received in threaded grooves **248**A and **248**B, respectively, which extend into the front half of the removable mounting assembly **240**. Both the front half **240** and the rear half **242** of the mounting assembly include semi-circular mounting surfaces **250** and **252** respectively, which are sized and shaped to fit around the stem of the shifter **210**. Desirably, the housing assembly **220** and thus, the actuator tabs **222** are placed close to the shifter head **211** so that the driver can access the tabs **222** without moving his or her hand an appreciable distance from the shifter head **211**.

While the foregoing description of figures is directed toward the preferred embodiments in accordance with the present invention, it should be appreciated that numerous modifications can be made to the various components of the present control unit for an audio system as discussed above. In this regard, such modifications are encouraged to be made in the specific placement, structure, materials and functions of the control unit of the present invention without departing from the novel spirit and scope of same. Accordingly, the foregoing description of the preferred embodiments should be taken by way of illustration rather than by way of limitation, which is defined by the claims set forth below.

We claim:

1. A control unit for an automobile music system in an automobile having a floor mounted gear shifter arranged next to the operator's seat at a central area within an automobile, said control unit comprising: a support section mounted on said shifter for supporting an operator's hand; and transmitting means including a plurality of actuators mounted in correspondence with said support section at said